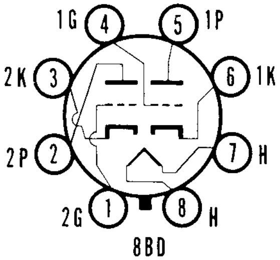


SYLVANIA TYPE 10EG7



MECHANICAL DATA

Bulb	T-9
Base	B8-58, Short Intermediate Shell Octal, 8-Pin
Outline	9-38
Basing	8BD
Cathode	Coated Unipotential
Mounting Position	Any

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage	9.7 Volts
Heater Current	600 Ma
Heater Warm-up Time[1]	11 Seconds
Maximum Heater Current Range[2]	560-640 Ma
Heater-Cathode Voltage (Design Maximum Values)[2]	
Heater Negative with Respect to Cathode	
Total D C and Peak	200 Volts Max.
Heater Positive with Respect to Cathode	
D C	100 Volts Max.
Total D C and Peak	200 Volts Max.

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

	Section No. 1[5]	Section No. 2[5]
Grid to Plate	4.4	9.5 $\mu\mu$f
Input: g to (h+k)	2.2	7.0 $\mu\mu$f
Output: p to (h+k)	0.6	1.6 $\mu\mu$f

RATINGS (Design Maximum Values)[2]

Vertical Deflection Oscillator and Amplifier[3]

	Section No. 1 Oscillator	Section No. 2 Amplifier
Plate Voltage	330	330 Volts Max.
Peak Positive Pulse Plate Voltage	...	1500 Volts Max.
Peak Negative Pulse Grid Voltage	400	250 Volts Max.
Plate Dissipation[4]	1.5	10 Watts Max.
Average Cathode Current	22	50 Ma Max.
Peak Cathode Current	77	175 Ma Max.
Grid Circuit Resistance		
Self Bias	2.2	2.2 Megohms

AVERAGE CHARACTERISTICS

	Section No. 1[5]	Section No. 2[5]
Plate Voltage	250	150 Volts
Grid No. 1 Voltage	-11	-17.5 Volts
Plate Current	5.5	45 Ma
Transconductance	2000	7500 μmhos
Amplification Factor	17.5	6.0
Plate Resistance (approx.)	8750	800 Ohms
Ec for Ib = 10 μa (approx.)	-20	... Volts
Ec for Ib = 100 μa (approx.)	...	-40 Volts
Ib at Ec = -25 Vdc	...	8 Ma
Ib with Eb = 60 V and Ec = 0 V	...	95 Ma

NOTES:

1. Heater warm-up time is defined as the time required for the voltage across the heater to reach 80% of the rated heater voltage after applying four (4) times rated heater voltage to a circuit consisting of the tube heater in series with a resistance equal to three (3) times the rated heater voltage divided by the rated heater current.

NOTES: (cont'd)

2. Design Maximum Ratings are the limiting values expressed with respect to bogey tubes at which satisfactory tube life can be expected to occur. To obtain satisfactory performance, therefore, the equipment designed must establish the circuit design so that no design-maximum value is exceeded with a bogey tube under the worst probable operating conditions with respect to supply-voltage variation, equipment component variation, equipment control adjustment, load variation, and environmental conditions.
3. For operation in a 525 line, 30 frame system as described in "Standards of Good Engineering Practice for Television Stations; Federal Communications Commission." The duty cycle of the voltage pulse must not exceed 15% of one scanning cycle.
4. In stages operating with grid leak bias, an adequate bias resistor or other suitable means is required to protect the tube in the absence of excitation.
5. Section No. 1 connects to Pins 4, 5 and 6. Section No. 2 connects to Pins 1, 2 and 3.

APPLICATION

The Sylvania Type 10EG7 is a T-9 double triode with dissimilar sections. Section No. 1 is intended for use as a Vertical Deflection Oscillator having medium mu and Section No. 2 is intended for use as a Vertical Deflection Amplifier having low mu. Type 10EG7 is intended for use in television receivers employing series heater strings.